REMARKS

Status of Claims

Claims 41-43 and 45-47 are in the present application. Claims 1-3, 7, 10-14, 16, 18, and 27-28 are withdrawn pursuant to a restriction requirement. Claims 4-6, 8-9, 15, 17, 19-26, 29-40 and 44 are cancelled. Claim 41 is amended to more clearly recite the subject matter of the invention. No new matter is raised.

Claim Rejections: 35 USC §112

Claims 41-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. In particular, in the Final Office Action, the Examiner stated that the term "localized disturbances" used in claim 41 is not defined or mentioned in the specification. In the Advisory Action, the Examiner further stated that the term is vague and process dependent.

Claim 41 is amended to change the term "localized disturbances" to "access areas" and to recite that the film is exposed through the access areas. Basis for this amendment is found at page 7, lines 24-25. Applicant submits that the claims are sufficiently definite and supported to satisfy the requirements of 35 USC §112. Reconsideration and withdrawal of the rejection is respectfully solicited.

Claim Rejections: 35 USC §102

Claims 1-42 & 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Curro et al (WO 2000/37249) as evidenced by Benson, US 5,628,097 ("Benson") and Ahr, US 4,463,045 ("Ahr"). In the Final Office Action, the Examiner explained that Curro is relied upon as teaching a fibrous nonwoven web/ elastic film laminate with a surface energy gradient in which the surface energy of the fibrous layer is lower than that of the film layer, wherein the layers are bonded together and are both apertured such that the apertures in the nonwoven layer expose the apertured film. Benson, which is incorporated by Curro, is relied upon as teaching activation stretching as a method of creating apertures in a nonwoven web. Ahr, also incorporated by Curro, is relied upon as teaching vacuum aperturing of the film. In the Advisory Action, the Examiner further explained that activation stretching is a process limitation and that, regardless of whether the nonwoven was activation stretched before lamination or after

lamination, the final structure of the laminate would be the same as that recited in the claims, or so nearly the same as to render the claimed laminate obvious. The rejection is respectfully traversed.

Independent claim 41 is amended to recite that the fibrous web is an extensible, bonded carded web. The teaching that the fibrous web is extensible is found on page 1, lines 24-26 of the provisional application 60/527,898. The teaching that the fibrous web is a bonded carded web is found at page 8, lines 15-17 of the present application. Thus, these amendments present no new matter.

Regarding the explanation that the laminate of Curro would be identical to the claimed laminate, the Examiner is mistaken. A laminate that has been activation stretched after lamination is significantly different than a laminate formed by bonding an activation-stretched nonwoven to a film. When a laminate is activation stretched, the nonwoven web is constrained during the stretching process at all bond points, as well as where the nonwoven contacts the teeth of the IMG rollers. By contrast, when a nonwoven web alone is IMG activated, it is not constrained anywhere except at the teeth of the IMG rollers. Thus, the types of forces acting on the web are different, depending upon whether the web is activated by itself or as part of a laminate. The difference is forces translate into different effects on the web, which in turn will translate into different structural effects on the web. For example, when a nonwoven web is activated as part of a laminate, the additional constraints result in increased tufting, resulting in a web that is softer, quieter and with overall improved tactile properties. By contrast, activation of a nonwoven web alone results in a reduction in basis weight and some reduction in bending stiffness, but little other changes in the web.

In addition, by activation stretching the laminate, as opposed to the nonwoven alone, the film component of the laminate will also undergo activation stretching. This results in a corrugation of the film component and thus the entire laminate. The corrugation creates folds in the film and the laminate, which can then "unfold" as tension is applied to the laminate. Releasing the tension results in a retraction of the laminate back to its corrugated state, thus providing the laminate with "form elasticity", despite the lack of elastomeric resins. In addition, when activation stretched, the basis weight of the laminate is reduced and the surface area is increased.

The laminates of Curro are not corrugated, but instead are flat in appearance. In addition, the webs of Curro do not have form elasticity, and instead rely on the use of expensive elastomeric resins to obtain extension and retraction properties. In addition, the basis weight of the laminates in Curro is fixed at the time of making the laminate as in the surface area.

It is of course known in the art that elastic laminates can be corrugated by laminating the film to the nonwoven web while the film is under tension. When the tension is released, the elastic film retracts and the laminate has a corrugated appearance. However, this technique cannot be used with vacuum lamination because there is no way to vacuum laminate the webs while the film component is under tension. Thus, the combination of Curro, Benson and Ahr to produce corrugated, vacuum laminated materials with access areas in the nonwoven and an energy gradient between the nonwoven and the film is simply not possible.

Moreover, Curro prefers a spunbonded or meltblown nonwoven web. Such webs are continuous fiber webs, as opposed to staple fiber webs like the bonded carded nonwoven recited in the claims. Applicant has found that the activation stretching process generally lacks sufficient energy to break fibers. The teachings of Benson bear this out as Benson requires that the nonwoven be weakened before being subjected to activation stretching. Applicant's own experience is that attempting to create apertures or access areas by activation stretching of a continuous fiber web, such as a spunbonded or meltblown web preferred by Curro, results in a web that is nearly unusable. Specifically, activation of a continuous fiber web results in a very highly lofted, fuzzy, hairy web – something resembling cotton candy – that would not meet consumer acceptance in hygiene applications and presents difficulties in handling, processing and lamination.

In addition, the process of Benson results in a nonwoven web that has apertures in predetermined areas. This is necessarily so because the web needs to be weakened first, and then activated to create apertures in the weakened areas. Because the weakened areas are known, the locations of the apertures are also known. By contrast, the access areas created by activation stretching the laminate of this invention are randomly generated and the location of the access areas is not known until they are actually formed. Similarly, the apertures created by Benson's process are more uniform in size, shape and appearance as compared to the access areas generated in the nonwoven layer of this invention.

Based on the above, activation stretching after lamination to create access points in the nonwoven produces a different material compared to making a laminate using an activated fibrous web as taught in Benson. The materials are different in appearance, are different in structure, are different in texture, and are different in their properties.

Similarly, the Examiner's position that the present claims recite product-by-process limitations is not entirely correct. Activation stretching of the laminate results in a defined, reproducible and readily identified set or features in the final laminate, including form elasticity, corrugation, and other physical, structural and functional properties noted above. Because not all activation stretching will necessarily result in creation of access areas to expose the film surface, that feature is specifically recited in the claims. Applicants submit that the inherent features of activation-stretched laminates, such as corrugation, however, need not be recited specifically and are appropriately captured and presented by the reference to activation stretching of the laminate.

As presented in the Amendment filed December 7, 2009, it would not have been obvious to modify Curro and bond the nonwoven web to the film before activation stretching. Benson teaches activation of the nonwoven to create apertures. Neither Curro nor Benson even hints at aperturing the nonwoven after making the laminate. In addition, the Benson process requires first forming weakened areas in the nonwoven by applying heat to melt or soften the nonwoven web. Because nonwoven webs are typically made of polypropylene, which has a higher melting point than the polyethylene used to make the film layer, one skilled in the art would not be motivated to use Benson's process on a composite for fear of destroying the film. Moreover, activation stretching of the composite, as opposed to the nonwoven alone, requires additional energy if for no other reason that the thickness of the material being activated is increased. That additional energy raises concerns regarding delamination of the film from the nonwoven, destruction of the film layer, destruction of the nonwoven layer, tearing, and/or other damage to the composite. Accordingly, there is no reasonable expectation by those skilled in the art that the Benson process would have the desired result if applied to a composite as opposed to the nonwoven web alone.

For these reasons, Applicant submits that the claimed invention is not anticipated by nor render obvious by Curro.

Regarding the rejections of claims 42 and 45-47, those claims all depend from and further limit claim 41. Accordingly, such dependent claims are also believed to be allowable. In addition, Ahr does not mention the terms "activation", "stretch", "IMG" or "intermeshing" and thus does not cure the fundamental deficiencies noted above regarding Curro and Benson. Thus, the addition of the teachings of Ahr does not alter the analysis or conclusions presented above.

Claim Rejections: 35 USC §103

Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curro et al. (WO 2000/37249) in view of Thomas (U.S. Pat. 6,242,074). In the final Office Action, the Examiner explained that Curro teaches a fibrous nonwoven web/ film laminate with a surface energy gradient in which the surface energy of the fibrous layer is lower than that of the film layer, wherein the layers are bonded together and are both apertured such that the apertures in the nonwoven layer expose the apertured film. The Examiner further explained that Thomas was relied upon for bonding a nonwoven web with slits to a film in a vacuum lamination process. In the Advisory Action, the Examiner explained that vacuum lamination is a well-known technique and it would be obvious to laminate a nonwoven web to a breathable film, whether or not the nonwoven itself was breathable. The rejection is traversed.

As to claim 44, the claim is cancelled so the rejection is moot. As to claim 43, the claim depends from and further limits claim 41, which is patentable over the art for the reasons noted above. Thomas does not teach activation stretching of a composite material and does not contain the words "stretch", "activation", "IMG" or "intermeshing" and thus does not cure the deficiencies of Curro noted above. Accordingly, Thomas fails to contain any disclosures that would enable a skilled artisan to provide the missing elements from Curro's teachings to arrive at the claimed invention. Thus, claim 43 is not render obvious by the combination of Curro with Thomas. Reconsideration and withdrawal of the rejection is respectfully solicited.

Conclusion

For the reasons stated above, claims 41-43 and 45-47 define patentable subject matter and the references of record do not teach, disclose or suggest the composite recited therein. Reconsideration and withdrawal of all claim objections and claim rejections is solicited, as is a notice of allowance with respect to the claims under prosecution.

Upon the indication of allowable subject matter, Applicant will seek to rejoin the withdrawn claims and amend those claims to conform in scope to the allowed claims.

If the Office is not inclined to allow the claims in their current form, Applicants respectfully request an opportunity to have a personal interview with the Examiner to discuss the speedy resolution of any remaining issues.

Respectfully Solicited,

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